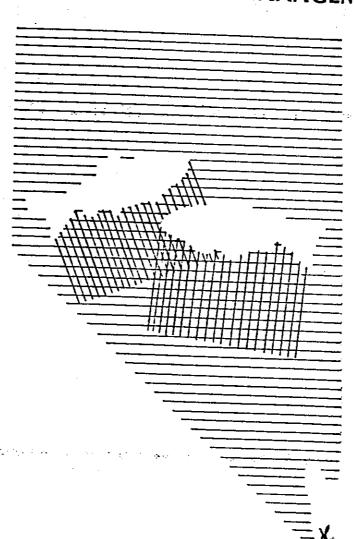
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NDOW (1986)

NEVADA

DEPARTMENT OF WILDLIFE

STATEWIDE FISHERIES MANAGEMENT



FEDERAL AID JOB COMPLETION REPORT

F-20-21

1985

ENDEMIC GAMEFISH

MANAGEMENT

JOB 207

JOB PROGRESS REPORT

State:

Nevada

Project No.:

F-20-21

Rame:

Statewide Fisheries Mgt.

Job No.:

207

Title: Endemic Gamefish Mgt.

Period Covered: January 1, 1985 through December 31, 1985

Robert W. Layton

Date:

Date:

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SUMMARY

Considerable effort was expended on the implementation of the Lahontan Cutthroat Trout Species management Plan for the Humboldt River Drainage Basin. Pearl Creek, SFHRDS, received an additional augmentation of cutthroat trout in a continuing effort to reestablish a native trout fishery. A proposal to introduce cutthroat trout into Thompson Creek was drafted and submitted to the Humboldt National Forest and awaits their signatory approval. A proposal to introduce cutthroat into Willow Creek, SFHRDS, has been postponed. Cutthroat trout from three streams were collected for evaluation of genetic purity through electrophoretic analysis.

The Redband Trout Species Management Plan is being written emphasizing management guidelines and goals. Trout from two streams with possible redband trout populations were collected for species determination through electrophoretic analysis.

Intensive inventory of stream habitat and fish populations was completed on the W.F. Jarbidge River within Nevada. Bull trout were found at low population levels in limited distribution.

SUBJOB 207.3 REDBAND TROUT

OBJECTIVE: To collect an adequate sample of potential redband trout from selected populations in streams in the Owyhee River drainage system for genetic evaluation of purity through electrophoretic analysis.

<u>Progress</u>: Trout were collected from two streams in the Owyhee River drainage and sent to University of California, Davis, for electrophoretic analysis.

PROCEDURE: Trout were collected from Wall Creek and Indian Creek, SFORDS, utilizing a backpack electroshocker. Collected fish were held alive in a portable fish tank until they were transported to the Regional headquarters where they were immediately frozen. After all collections were completed, the frozen fish were transported to the facilities at University of California, Davis, for analysis.

<u>FINDINGS</u>: The electrophoretic work and evaluation has not been conducted, thus final analysis is pending and results are unavailable at this time.

<u>OBJECTIVE</u>: To review, present for agency and public comment, and finalize the Redband Trout Species Management Plan.

<u>Progress</u>: Review of the plan identified the need to specify more detailed management guidelines and goals within the plan. This was not completed and the objective was moved forward into the next work segment.

SUBJOB 207.4 BULL TROUT (DOLLY VARDEN TROUT)

<u>OBJECTIVE</u>: To inventory population status and distribution of bull trout in the W.F. Jarbidge River and its tributaries.

<u>Progress:</u> Inventory on the W.F. Jarbidge River was completed, but the tributary streams were not inventoried.

PROCEDURE: Stream and riparian habitat and fish populations were inventoried in September on the W.F. Jarbidge River utilizing the standard procedures and equipment employed for intensive stream survey. A total of 18 sample stations with five transects per station for 90 cross stream transects for habitat inventory and 18 sample locations for population inventory were completed. The entire reach of W.F. Jarbidge River in Nevada was inventoried. Length of captured fish was measured in millimeters and general body condition was described.

FINDINGS: Stream habitat throughout the W.F. Jarbidge River is generally in very fair condition with exception of channelized sections in the vicinity of the town of Jarbidge. At the time of the survey bull trout were discovered to occupy the river from the town of Jarbidge to the headwater forks for a total distance of 4 miles. Population levels were low ranging from 40.6 to 224.7

fish/mile with an average of 74.2 fish/mile. Size of captured bull trout ranged from 36 mm to 266 mm for an average of 114 mm. Captured fish were described as in fair body condition and health. Other fish found cohabiting with the bull trout were hatchery reared and wild rainbow in moderate numbers, mountain whitefish in low abundance, sculpin in large numbers, and mountainsucker at low population levels.

Low abundance and limited distribution of bull trout indicate the population status will remain at low levels and is possibly showing a trend toward total displacement by other fish species. The majority of bull trout were captured in the upper reaches of the stream where other fish species were in low numbers or absent. This indicates bull trout aren't coexisting with other fish species and displacement is occurring. It also suggests the possibility of a selective preference for cooler and higher quality water found closer to the headwater areas. The limited distribution, low abundance, and general body condition of bull trout suggest the quality and quantity of the stream habitat and associated biological parameters may be limiting factors.

RECOMMENDATIONS: Continue to inventory the Jarbidge River drainage to determine the population status, distribution, and life history of the bull trout in Nevada.